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AKIN GUMP STRAUSS HAUER & FELD L.L.P.
ONE COMMERCE SQUARE
2005 MARKET STREET, SUITE 2200
PHILADELPHIA, PA 19103

EXAMINER	
NGUYEN, HUY THANH	

ART UNIT	PAPER NUMBER
2616	

DATE MAILED: 09/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/780,534	KOSHINO ET AL.	
	Examiner	Art Unit	
	HUY T. NGUYEN	2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-16 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-16 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 02/12/02,02/09/01.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-6, 8-10 and 12-16 are rejected under 35 U.S.C. 102(e) as being anticipated by Takahashi (JP 11-144392).

Regarding claim 1, Takahashi discloses a data recording device (Figs. 3,7,9-10) comprising:

an interface part for receiving digital data;

a disc (10) which can record said digital data ;

a block generation part (36) for identifying data blocks in the frame unit from among said received digital data and for generating, at least, the first audio block and the second audio block from among said data blocks; and

a data recording and reproduction control part for controlling said first audio block and said second audio block to be recorded respectively from the leading address (track

number or address from a lead in area of a recording segment formed on said disc (Abstract , sections 006-0013, 0029,0033, English translation , Figs. 9-12).

Regarding claim 2 , Takahashi teaches data recording device characterized by comprising: an interface part for receiving digital data;

a disc which can record said digital data;

a block generation part for identifying data blocks in the frame unit from among said received digital data and for generating, at least, a first video block and a second video block from among said data blocks; and

a data recording and reproduction control part for controlling said first video block and said second video block to be recorded respectively from the leading address of a recording segment formed on said disc (Figs. 9-12 Abstract , sections 006-0013,0029.

Regarding claim 3, Takahashi further teach a data recording device according to Claims 1 or 2 characterized in that said block generation part determines data among said data blocks forming, at least, one block among data among said data blocks forming, at least, one block among said first audio block, said second audio block, said first video block or said second video block in accordance with a signal format.(Figs 7,9-12).

Regarding claim 4, Takahashi discloses a data recording device ,Figs 7,9-12, characterized by comprising: an interface part for receiving digital data;

a disc which can record said digital data;

a block generation part which identifies data blocks in the frame unit from among said received digital data, generates, at least, a first audio block and a second audio block

from among said data blocks and generates a first multi-audio block comprising plural said first audio blocks and a second multi-audio block comprising plural said second audio blocks; and

a data recording and reproduction control part for controlling said first multi-audio blocks and said second multi-audio blocks to be recorded respectively from the leading address of a recording segment formed on the disc (Figs 7,9-12, sections 0006 –0013, 0029, English translation).

Regarding claim 5, Takahashi further teaches a data recording device according to Claim 4 characterized in that said first multi-audio block and said second multi-audio block are formed of audio blocks for 16 frames respectively (section 007, N frames).

Regarding claim 6, Takahashi further teaches medium is a hard disc (section 0067)

Method claims 8-10 correspond to apparatus claims 1-4. Therefore method 8-10 are rejected by the same reason as applied to apparatus claims 1-4 .

Regarding claim 12, Takahashi discloses a data recording device characterized by comprising:

a disc which can record and reproduce digital data; and

a buffer memory (35) which records first digital data reproduced from said disc (75,78) in the unit of a data block of a constant. data length and which records received second digital data in correspondence with said data block,

wherein said second digital data is recorded in a memory region on said disc where a part of said first digital data in correspondence with said second digital data has been recorded (Figs. 7,9-12, Abstract, sections 006-0013,0029, 0033).

Regarding claim 13, Takahashi further teaches a data recording device according to Claim 12 characterized in that said first digital data include a video signal or an audio signal and said second digital data are an audio signal or a video signal. (See Figs. 7,10-12)

Regarding claim 14, Takahashi further teaches the data recording device according to Claim 13 characterized in that said constant data length is N frame (s) (N is a positive integer, including 1, (section 0017) .

Regarding claim 15, Takahashi discloses a data recording device according to Claim 12 characterized by comprising:

a disc which can record and reproduce digital data; and a buffer memory which records first digital data reproduced from said disc in the unit of a data block of a constant data length and which records received second digital data in correspondence with said data block, wherein at least one signal among the video signals or the audio signals included in said first digital data and at least one signal among the video signals or the audio signals included in said second digital data are compared in, at least, format or encoding system, and in the case that the two are different the video signal or the audio signal included in said second digital data is converted into the signal which is of the same format or of the same encoding system as that of the video signal or the audio signal included in said first digital data, and the converted video signal or the

converted audio signal can be recorded on the disc since Takahashi apparatus comprises a data converting mean for converting the received video and audio signals into the same format of blocks for recording on a medium.

Regarding claim 16, Takahashi further teaches the data recording method characterized by comprising: the step of reproducing first digital data from a disc and of recording said first digital data in a buffer memory in the unit of a data block of a constant data length;

the step of recording received second digital data in said buffer memory in correspondence with said data block; and the step of recording said second digital data in a memory region on said disc where a part of said first digital data has been recorded in correspondence with said second digital data (Figs, 7,9-12 sections 0033-0045).

3. Claims 1 –5 and 7-16 are rejected under 35 U.S.C. 102(e) as being anticipated by Gushima et al (5506825).

Regarding claim 1, Gushima discloses a data recording device (Figs 3, 6-9, column 11-12) characterized by comprising:

an interface part for receiving digital data (Fig. 6) ;

a disc (1) which can record said digital data ;

a block generation part (19) for identifying data blocks in the frame unit from among said received digital data and for generating, at least, the first audio block and the second audio block from among said data blocks; and

a data recording and reproduction control part (17,12,25) for controlling said first audio block and said second audio block to be recorded respectively from the leading address (track number or address from a lead in area of a recording segment formed on said disc (Figs. 3,22-23).

Regarding claim 2 , Gushima teaches data recording device (Figs 3, 6-9, column 11-12) characterized by comprising: an interface part for receiving digital data;
a disc which can record said digital data;
a block generation part for identifying data blocks in the frame unit from among said received digital data and for generating, at least, a first video block and a second video block from among said data blocks; and
a data recording and reproduction control part for controlling said first video block and said second video block to be recorded respectively from the leading address of a recording segment formed on said disc (Figs. 3, 22-23, column 5, lines 40-50, column 18)..

Regarding claim 3, Gushima further teaches the data recording device according to Claims 1 or 2 characterized in that said block generation part determines data among said data blocks forming, at least, one block among
data among said data blocks forming, at least, one block among
said first audio block, said second audio block, said first video block or said second video block in accordance with a signal format.(Figs 7,9-12).

Regarding claim 4, Gushima discloses a data recording device characterized by comprising: an interface part for receiving digital data;

a disc which can record said digital data;

a block generation part which identifies data blocks in the frame unit from among said received digital data, generates, at least, a first audio block and a second audio block from among said data blocks and generates a first multi-audio block comprising plural said first audio blocks and a second multi-audio block comprising plural said second audio blocks; and

a data recording and reproduction control part for controlling said first multi-audio blocks and said second multi-audio blocks to be recorded respectively from the leading address of a recording segment formed on the disc (Figs. 3, 6-9, 22-23, column 5, lines 40-50, column 18).

Regarding claim 5, Gushima further teaches the data recording device according to Claim 4 characterized in that said first multi-audio block and said second multi-audio block are formed of audio blocks for 16 frames respectively since the video and audio are formed by N frame .

Regarding claim 7, Gushima further teaches the digital data are digital data of a DV format which include the audio signals of plural channels and in that said first audio block and said second audio block comprise a pair of stereo audio signals respectively (multi audio channels , column 9, lines 30-60)).

Method claims 8-11 correspond to apparatus clams 1-4 and 6 . Therefore method 8-10 are rejected by the same reason as applied to apparatus claims 1-4 .

Regarding claim 12, Gushima discloses a data recording device characterized by comprising:

a disc which can record and reproduce digital data; and

a buffer memory (35) which records first digital data reproduced from said disc (75.78) in the unit of a data block of a constant. data length and which records received second digital data in correspondence with said data block,

wherein said second digital data is recorded in a memory region on said disc where a part of said first digital data in correspondence with said second digital data has been recorded (Figs. 3,6, 7,9-10,23 column 5, lines 40-50, column 18)...

Regarding claim 13, Gushima further teaches a data recording device according to Claim 12 characterized in that said first digital data include a video signal or an audio signal and said second digital data are an audio signal or a video signal. (Figs. 3,6, 7,9-10,23 column 5, lines 40-50, column 18).

Regarding claim 14, Gushima further teaches the data recording device according to Claim 13 characterized in that said constant data length is N frame (s) (N is a positive integer, including 1 since the video signal and audio signal of recording data are frames (units or sections)) .

Regarding claim 15, Gushima discloses a data recording device according to Claim 12 characterized by comprising:

a disc which can record and reproduce digital data; and a buffer memory which records first digital data reproduced from said disc in the unit of a data block of a constant data length and which records received second digital data in correspondence

with said data block, wherein at least one signal among the video signals or the audio signals included in said first digital data and at least one signal among the video signals or the audio signals included in said second digital data are compared in, at least, format or encoding system, and in the case that the two are different the video signal or the audio signal included in said second digital data is converted into the signal which is of the same format or of the same encoding system as that of the
video signal or the audio signal included in said first digital data, and the converted video signal or the converted audio signal can be recorded on the disc since Gushima teaches changing the received audio or video signal into a format of blocks to be recorded on the medium (column 18, Figs. 3,6-9, 23)

Regarding claim 16, Gushima further teaches a data recording method characterized by comprising: the step of reproducing first digital data from a disc and of recording said first digital data in a buffer memory in the unit of a data block of a constant data length;
the step of recording received second digital data in said buffer memory in correspondence with said data block; and the step of recording said second digital data in a memory region on said disc where a part of said first digital data has been recorded in correspondence with said second digital data (Figs. 3,6, 7,9-10,23 column 5, lines 40-50, column 18).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 7 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takahashi (JP 11-144392) in view of Fujinami et al (5,940,351).

Regarding claims 6 and 11, Takahashi fails to teach the audio signal blocks comprising stereo audio signal bocks.

Fujinami teaches generating audio signals of stereo audio signal into audio blocks (column 5, line 60 to column 6, line 5). It would have been obvious to one of ordinary skill in the art to modify Takahashi with Fujinami by using stereo audio signal generating means as taught by Fujinami with the apparatus of Takahashi for receiving stereo audio signals and generating the stereo audio signal blocks thereby provide more interesting to the user when hearing the audio signal.

6. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gushima (5506825) in view of Iwasaki et al (5,684,784).

Gushima fails to teach that the medium is a hard disc . Iwasaki teach using a hard disc (column 7, lines 45-50).

It would have been obvious to one of ordinary skill in the art to modify Gushima with Iwasaki by using a hard disc as an alternative to the medium of Gushima for recording audio and video blocks .

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Tanaka et al teaches recording audio blocks and video bocks on an optical disc.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to HUY T. NGUYEN whose telephone number is (571) 272-7378. The examiner can normally be reached on 8:30AM -6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Groody can be reached on (571) 272-7950. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

H.N

HUY NGUYEN
PRIMARY EXAMINER